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REVENDECATIONS.

1. A system for picking up objects over a delimited surface, which consists of an automatic mobile machine provided with an onboard computer, at least one motor associated with a power source, a mechanical device for gripping and storing objects in a container supported by the mobile machine, a device for emptying said container, a device for limiting the pick up surface and a station in which the picked up objects may be unloaded.

2. A system as claimed in claim 1, characterized in that the power source is a rechargeable battery and that there is provided at least one station for recharging rechargeable batteries.

3. A system as claimed in claim 1 or 2, wherein the objects are golf balls.

4. A system as claimed in any preceding claim, wherein the battery recharging and the ball unloading stations are coupled.

5. A system as claimed in any preceding claim, wherein the surface limiting device consists of a wire extending at the periphery of said surface and being detectable by a detector carried by the machine.

6. A system as claimed in the preceding claim, wherein the machine reaches the station/s by following the surface limiting wire, the station/s being situated along said wire or on an extension thereof.

7. A system as claimed in the preceding claim, characterized in that the recharging station consists of at least one fixed rail which is situated along said

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wire and is adapted to come in contact with one of two side brushes carried by the mobile machine.

5 8. A system as claimed in any preceding claim, characterized in that the recharging stations are situated in the proximity of players.

10 9. A system as claimed in any preceding claim, wherein the station/s comprise a ball recovery bowl, equipped with a ball lifting system, and connected to the driving site by means of a duct which is adapted to convey balls in the immediate proximity of the players at least partly by gravity.

15 10. A system as claimed in any preceding claim, wherein the automatic machine proceeds over the pick up surface at least partly in a random manner.

20 11. A system as claimed in claim 1, wherein the mechanical gripping system consists of a rotary brush having spikes, arranged radially around the shaft of said brush, said spikes being adapted to pierce the objects situated on said surface, and said objects being dragged along into a circular movement, released from the spikes by fixed elements which are engaged between the spikes, and deviate the objects toward a storage device.

25 12. A system as claimed in the preceding claim, wherein the picked up objects are dead leaves.

13. A system as claimed in claim 9, wherein the picked up objects are paper sheets.

14. An automatic pick up machine adapted to the system as claimed in any preceding claim.

30 15. A machine as claimed in the preceding claim, characterized in that it includes deflector arms which

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are adapted to deviate the objects to be picked up toward the gripping device, as the machine proceeds.

5 16. A system as claimed in claims 1 through 12 or a pick up machine as claimed in claims 12 through 15, characterized in that it also includes an automatic system for mowing a grass surface.

10 17. A method of picking up objects over a predetermined surface, by using a system or a machine as claimed in claims 1 through 16.

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